



# भारत का राजपत्र The Gazette of India

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No. 31]

NEW DELHI, SATURDAY, AUGUST 4, [(SRAVANA 13, 1895)

इस भाग में निम्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

## भाग III—खण्ड २

## PART III—SECTION 2

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस

Notifications and Notices issued by the Patent Office relating to Patents and Designs

### THE PATENT OFFICE

#### Patents and Designs

*Calcutta, the 4th August 1973*

The dates shown in crescent brackets are the dates claimed under Section 135 of the Act.

#### Application for Patents filed at the Head Office

*16th July 1973*

- 1653/Cal/73 Council of Scientific and Industrial Research. Improvements in or relating to centrifugal irrigation pump.
- 1654/Cal/73. Orissa Cement Limited. Cillica refractory bricks.
- 1655/Cal/73. Enviro-Gro, Inc. Methods and apparatus for making self-starting plant markers.
- 1656/Cal/73. Girling Limited. Wheel slide protection systems. (18th July 1972).
- 1657/Cal/73. Girling Limited. Wheel slide protection systems (18th July 1972).
- 1658/Cal/73. Imperial Chemical Industries Limited. Manufacture of polyesters. (21st July 1972).
- 1659/Cal/73. Imperial Chemical Industries Limited. Manufacture of polyesters. (21st July 1972).
- 1660/Cal/73. Centre De Recherche Industrielle Du Quebec. Method for making an integrated circuit apparatus. (28th July 1972).
- 1661/Cal/73. Preformed Line Products Company. Appliance for linear bodies.
- 1662/Cal/73. Burroughs Corporation. Display panel printing apparatus. (23rd May 1973).
- 1663/Cal/73. Burroughs Corporation. Segment display panel with cathode groups. (15th May 1973).
- 1664/Cal/73. Burroughs Corporation. Self regulated drive apparatus for display systems. (22nd May 1973).

1—177G1/73

*17th July 1973*

- 1665/Cal/73 Days Auto-Mech Industries. Fuel tank can locking type.
- 1666/Cal/73. J. F. Lauenborg. An arrangement relating to ship hulls.
- 1667/Cal/73. Brooke Bond Liebig Limited. Improvements in or relating to extraction. (19th July 1972).
- 1668/Cal/73. Taylor & Challen Limited. Coining press. (21st July 1972).
- 1669/Cal/73. Pirelli General Cable Works Limited. High tension cables. (25th July 1972).
- 1670/Cal/73. Amsted Industries Incorporated. Truck snubbing arrangement.
- 1671/Cal/73 C. A. Norgren Limited. Means for coupling fluid control components in fluid lines. (18th July 1972).
- 1672/Cal/73. Eli Lilly and Company A process for preparing novel tetrazolo-(1, 5-a) quinoline compounds. [Divisional date 26th June 1971].
- 1673/Cal/73. Kishor Chandra Kothari of P. Kishore & Co. A rechargeable cell or storage cell. [Addition to no 1115/72].

*18th July 1973*

- 1674/Cal/73 Sunil Kumar Dhar Pretreatment solution for iron and steel surface based on phosphoric acid, chromic acid and tannin.
- 1675/Cal/73 Glaxo Laboratories Limited Chemical compounds. (19th July 1972). [Addition to No. 134341].
- 1676/Cal/73. Shell Internationale Research Maatschappij B. V. Process for the preparation of ketones.
- 1677/Cal/73 K. G. Engineering Laboratories Limited. Improvements in electric drive transmission systems. (26th July 1972).

- 1678/Cal/73. K. G. Engineering Laboratories Limited. Accelerator for car transmission system. (26th July 1972).
- 1679/Cal/73. Metallgesellschaft A. G. Process of desulfurizing manufactured fuel gases and synthesis gases.
- 1680/Cal/73. Westinghouse Electric Corporation. Slitting pattern for expanded, helically wound fin heat exchanger.
- 1681/Cal/73. Seaman Corporation. Rigid frame, tensioned fabric structure. (13th July 1973).
- 1682/Cal/73. Snam Progetti S.p.A. Process for hydrogenating diolefinic hydrocarbons to mono olefinic hydrocarbons.
- 1683/Cal/73. Naarden International N. V. Process for the preparation of sesquiterpene ketones. (20th July 1972).
- 1684/Cal/73. Barrett Bros. & Burston & Company Proprietary Limited. Improvements relating to malting (31st July 1972).
- 1685/Cal/73. Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Bruning. Fluting device for nuclide generators.
- 1686/Cal/73. Aktiebolaget Tudor. Filter cap for storage batteries.
- 1687/Cal/73. Aktiebolaget Tudor. Electrode for electrical lead accumulators.
- 1688/Cal/73. Manindra Nath Sarkar. Float operated valve. 19th July 1973
- 1689/Cal/73. Council of Scientific and Industrial Research. Improvements in or relating to preparation of phosphor grade zinc sulphide useful for luminescent devices even starting from laboratory grade raw materials.
- 1690/Cal/73. Council of Scientific and Industrial Research. Improvements in or relating to spindle crowns for high speed spinning. [Addition to No. 111897].
- 1691/Cal/73. Superba S. A. Selection impulse generator for knitting machine needles.
- 1692/Cal/73. Rotaflex (Great Britain) Limited. Electrical supply installations. (21st July 1972).
- 1693/Cal/73. Imperial Chemical Industries Limited. Phosphorus acid amides. (24th July 1972).
- 1694/Cal/73. Bayer Aktiengesellschaft. New 2-alkylamino-dihydropyridines, their production and their medicinal use.
- 1695/Cal/73. Gruppo Lepetit S.p.A. New isoxazolidine derivatives.
- 1696/Cal/73. Oy Tampella AB. Light mortar for fin-stabilised projectiles.
- 1697/Cal/73. Caledonian Mining Company Limited. Improvements in and relating to apparatus for preparing and dispensing mixtures of concrete and fibres. (22nd July 1972).
- 1698/Cal/73. Silo-Verfahrens AG. Apparatus for the production of a tube.
- 1699/Cal/73. Massey-Ferguson Services N. V. Locking means for a rotatable member. (2nd August 1972).
- 1700/Cal/73. Deutsche Gold-Und Silber-Scheideanstalt Vormals Roessler. Trialkoxycinnamoylaminocarbonia acid.
- 1701/Cal/73. American Cyanamid Company. Nover carbonyl polymers.
- 1702/Cal/73. Siemens Aktiengesellschaft. A control unit for controlling the formation of firing pulses for the switching devices of apparatus.
- 1703/Cal/73. Asahi Kasei Kogyo Kabushiki Kaisha. Composite filament.
- 1704/Cal/73. Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Bruning. Novel water-soluble

monoazo dyestuffs and process for their preparation.

20th July 1973

- 1705/Cal/73. The Lucas Electrical Company Limited. Solenoid switches. (26th July 1972).
- 1706/Cal/73. Dunlop Limited. Improvements in or relating to the curing of rubber articles. (27th July 1972).
- 1707/Cal/73. The Lucas Electrical Company Limited. Battery charging systems. (3rd August 1972).
- 1708/Cal/73. Kleinfewers Industrie-Compagnie GmbH. A method for continuous full-width washing of textile runs and a washing tower for carrying out the method.
- 1709/Cal/73. Cassella Farbwerke Mainkur Aktiengesellschaft and Rutgerswerke Aktiengesellschaft Carrier composition and process for dyeing and printing.
- 1710/Cal/73. Labaz. Process for preparing benzo [b] thiophene derivatives (25th June 1971). [Divisional date 7th June 1972].
- 1711/Cal/73. A. Hoffmann and H. Spechtmeyer. Improvements in or relating to gas supplying apparatus. (15th May 1973).

#### Application for Patents Filed at Patent Office (Bombay Branch)

12th July 1973

- 230/Bom/73. Danfoss A/S. Reciprocating piston compressor, particularly for small refrigerator units.
- 231/Bom/73. Nima Private Limited. Improvements in or relating to electric fans. 13th July 1973
- 232/Bom/73. Pritam Malkani. A telescopic writing instrument.
- 233/Bom/73. N. S. Bhatthana. An interlocking block for use in the construction of load bearing walls or beams and columns with reinforcements.

#### Alteration of Date

135410. 1066/Cal/73. Ante-dated the 20th March 1971.
135405. 865/Cal/73. Ante-dated the 8th July 1971.

#### COMPLIE SPECIFICATIONS ACCEPTED

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A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2 (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office.

CLASS 83-B-3, 55-B-2.

91034.

IN HEAT TREATMENT OF A LIQUID. A METHOD AND DEVICE FOR BRINGING ABOUT THE SAME WATER CONTENT IN THE HEAT TREATED LIQUID AS IN THE NON-HEAT TREATED LIQUID.

AKTIEBOLAGET SEPARATOR, OF 8 FLEMINGGATAN, STOCKHOLM, SWEDEN.

Application No. 91034 filed November 28, 1963.

## 2 Claims.

In the treatment of a liquid, the method comprising the steps of continuously and indirectly preheating a stream of the liquid, continuously introducing steam into a confined stream of the indirectly preheated liquid to increase the temperature of said liquid while condensing steam therein, passing a confined stream of the resulting mixture of heated liquid and steam condensate to a vacuum zone and there cooling the mixture by rapid expansion in said zone with concomitant evaporation of part of said mixture, discharging a stream of cooled liquid from said zone, discharging a separate stream of vapor from said zone to maintain the vacuum therein, characterized in regulating said preheating step to maintain a constant temperature of the indirectly preheated liquid, sensing the temperatures of the indirectly preheated liquid and the stream of cooled liquid discharging from said zone, and maintaining said sensed temperatures at a predetermined differential by varying the rate of said vapor discharge, and therefore the vacuum in said zone, to counteract variations in said differential, said predetermined differential being such that said evaporated part of the mixture is of the same quantity as said steam condensed in the liquid.

CLASS 32-F.(b). 91600.

METHOD FOR MAKING BENZO(a) QUINOLIZINE DERIVATIVES.

THE WELLCOME FOUNDATION LIMITED OF 183-193, EUSTON ROAD, LONDON, N.W. 1, ENGLAND.

Application No. 91600 filed January 4, 1964.

Convention date January 21, 1963 (2476/1963) U.K.  
Addition to No. 74070.

## 4 Claims.

A method for making 11bH-benzo (a) quinolizine derivatives corresponding to general formula (III) shown in the accompanying drawing, which is to be read, as comprising also the mirror image of the structure depicted, wherein R<sup>1</sup> is an alkyl group having from 1 to 4 carbon atoms, R<sup>2</sup> is a lower alkoxy or hydroxy group, each of R<sup>3</sup> and R<sup>4</sup> is a methyl or an ethyl group, or R<sup>3</sup> and R<sup>4</sup> together form a methylene group, which method comprises a hydrogenation, preferably under acid conditions, of the corresponding compound of general formula (IV) wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are as defined above, in the presence of a palladium catalyst.

CLASS 32F-3-d 113605.

PROCESS FOR THE MANUFACTURE OF KAVAIN AND SUBSTITUTION PRODUCTS OF KAVAIN.

SPEZIALCHEMIE GMBH & CO., OF MUNICH, FEDERAL REPUBLIC OF GERMANY.

Application No. 1136/5 filed December 14, 1967.

## 9 Claims.

Process for the manufacture of 6-styryl-5: 6-dihydro- $\alpha$ -pyrone, and corresponding pyrones substituted in the pyrone ring or in the phenyl ring starting from  $\beta$ -alkoxy-crotonates, characterised in that the reaction of the  $\beta$ -alkoxy-crotonate with N-halogen and particularly with N-bromosuccinimide or 1: 3-dibromo-5: dimethyl-hydantoin is carried out at a temperature above 100°C, and preferably between 105 and 115°C in the absence of any solvent, the resulting succinimide or dimethyl-hydantoin being extracted from the reaction mixture, and the so-obtained r-halogen- $\beta$ -alkoxy-crotonic acid ester distilled in vacuum, treated with cinnamic aldehyde, cinnamic acetal, or substituted cinnamic aldehydes, such as, methylene-dioxy-cinnamic aldehyde in the presence of zinc in the usual, known manner and the 6-styryl- $\alpha$ -pyrone or a substituted 6-styryl- $\alpha$ -pyrone, such as Methysticine or 6-phenyl- $\alpha$ -pyrone precipitated from the so-obtained zinc salt by subsequent treatment with a mineral acid of a maximum strength of 10%, preferably hydrochloric acid, and isolated by separation from the reaction liquid.

CLASS 32-F.b. 115430.

OPTICAL RESOLUTION OF 1-(3, 4, 5-TRIMETHOXYBENZYL)-6, 7-DIHYDROXY-1, 2, 3, 4-TETRAHYDROISOQUINOLINE.

TANABE SEIYAKU CO., LTD. OF No. 21, 3-CHOME, DOSHOMACHI, HIGASHI-KU, OSAKA, JAPAN.

Application No. 115430 filed April 15, 1968.

## 3 Claims.

Process for the production of optically active acid addition salt of 1-(3, 4, 5-trimethoxybenzyl) 6, 7-dihydroxy-1, 2, 3, 4-tetrahydroisoquinoline which comprises treating a racemate of the compound with an optically active organic acid in a suitable solvent, and separating the resultant diastereomeric salts by the fractional crystallization.

CLASS 32-F.a, 32-F.c. 125133.

PROCESS OF PREPARING  $\gamma$ -CYANOBUTYRALDIMINES.

STAMICARBON N. V. OF VAN DER MAESENS-TRAAT 2, HEERLEN, THE NETHERLANDS.

Application No. 125133 filed February 4, 1970.

## 15 Claims—No. drawings.

A process of preparing a  $\gamma$ -cyanobutyraldimine by reacting an acetalimine with acrylonitrile, in which the acrylonitrile is reacted with the acetalimine at a temperature of from 70 to 130°C and in a ratio of at least 0.8 mole of acetalimine per mole of acrylonitrile, and after not more than 50% of the acrylonitrile has been converted, separating non-converted acrylonitrile and acetalimine from the reaction mixture containing a  $\gamma$ -cyanobutyraldimine;

CLASS 32-F-2-a, 32-F-2-b. 125134.

PROCESS OF PREPARING  $\gamma$ -CYANOBUTYRALDEHYDE.

STAMICARBON N. V., OF VAN DER MAESENS-TRAAT 2, HEERLEN, THE NETHERLANDS.

Application No. 125134 filed February 4, 1970.

## 10 Claims—No drawings.

A process of preparing  $\gamma$ -cyanobutyraldehyde, comprising subjecting a  $\gamma$ -cyanobutyraldimine to hydrolysis.

CLASS 14-A<sub>1</sub> & D<sub>1</sub>. 130788.

LEAD CHLORIDE WATER ACTIVATED CELL SYSTEM.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-1, INDIA.

Application No. 130788 filed March 30, 1971.

## 2 Claims.

A process of making a magnesium lead chloride battery system which consists in making lead chloride cathode from a mixture consisting of lead chloride, a conducting material like copper powder, lead powder, acetylene black, graphite powder and a binder material like polyvinyl alcohol, carboxymethyl cellulose, polyvinyl acetate, starch, agar-agar pressing the mixture over a conducting metallic grid or a wire mesh and subjecting it to heat treatment.

CLASS 6A-1. 131085.

A HAND OPERATED BELLOW PUMP.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-1, INDIA.

Application No. 131085 filed April 23, 1971.

## 6 Claims.

A hand operated bellow pump comprising a metal casing having an inlet pipe at its bottom and a discharge outlet channel at its enlarged top end, the said inlet pipe being provided with a polythene nonreturn foot valve assembly, a bellow preferably made of polythene having number of polythene stiffener rings at the weak points being provided in the said metal casing having operating clearance with the walls of the said casing, top end of the said bellow is open

for discharging the pumped water through the said discharge outlet channel and its bottom end being connected to the actuating steel rod through a metallic perforated cup assembly fixed at its center well within the bellow, a lever is connected to the said actuating rod through link mechanism for actuating the said bellow, the said perforated cup assembly being provided with a polythene valve, the vertical movement of which being guided through the guides provided at the actuating rod end extending well inside the said perforated cup.

CLASS 32-A-1.

131121.

A PROCESS FOR THE PRODUCTION OF BASIC AZO DYES.

SANDOZ LTD., OF LICHTSTRASSE 35, BASLE, SWITZERLAND.

Application No. 131121 filed April 26, 1971.

3 Claims.

A process for the production of basic azo dyes of the formula (I) shown in the accompanying drawings, where R stands for an alkyl radical which may be substituted,

R<sub>1</sub> for hydrogen, halogen or an alkyl radical which may be substituted,  
for an aliphatic, aromatic or araliphatic bridge member which may be substituted,  
Y for the direct linkage or -N-,

R<sub>2</sub>

R<sub>2</sub> for hydrogen or an alkyl radical which may be substituted,

A for an anion.

K+ for an ammonium or, hydrazinium radical or a cyclo-immonium radical of which may be substituted or the radical of an etherified hydroxylammonium group, which may be substituted,

or where the group of the structure (ii) in the formula (I) stands for the radical of a compound of the formula (III) shown in the drawings,

where R<sub>1</sub> stands for a hydrocarbon radical which may be substituted for the atoms or groups of atoms necessary for the formation of a multimembered ring of aromatic character which may bear further hetero atoms and may be further substituted,

which comprises coupling the diazo compound of an amine of the formula (XII) shown in the drawings with a coupling component of the formula (XIII) shown in the drawings, wherein K+, A—, Hal, R, R<sub>1</sub>, X and Y are as defined above.  
CLASS 39-K, 6B-2, 139-G. 131282.

PROCESS AND APPARATUS FOR MANUFACTURING SULPHUR.

SHELL INTERNATIONALE RESEARCH AATS-CHAPPIJ N.V. OF CAREL VAN BYLANDT LAAN 30, THE HAGUE, THE NETHERLANDS.

Application No. 131282 filed May 7, 1971.

34 Claims.

Process for manufacturing sulphur which comprises accepting on a solid acceptor which is able to accept sulphur oxides and release them again in the form of sulphur dioxide on being regenerated in an acceptance apparatus sulphur oxides from a gas mixture and subsequently freeing the sulphur oxides again by regenerating the loaded acceptor with a steam-diluted regeneration gas, the off-gas obtained in the regeneration step is contacted with a liquid absorbent which is selective with respect to sulphur dioxide, sulphur dioxide is subsequently expelled by heating from the liquid absorbent, whereafter at least part of this sulphur dioxide is reacted with hydrogen sulphide in a claus plant whereby elemental sulphur is formed.

CLASS 98-E, 141-C.

131344.

ENDOTHERMIC PROCESSES IN A SHAFT FURNACE-OR KILN AND MORE PARTICULARLY TO A PROCESS FOR CALCINING LIME.

HERMAN HOFER 2753 PIESTING, WOPFING 210, AUSTRIA AND ALOIS SCHMID, OF 1190 VIENNA, CHIMANISTRASSE 32, AUSTRIA.

Application No. 131344 filed May 13, 1971.

8 Claims.

A process involving an endothermic reaction in a furnace or kiln having first and second vertical shafts, each shaft having, from top to bottom, a preheating zone, a combustion zone and a cooling zone, the shafts being joined together at the lower end of the combustion zone which process comprises introducing the material required to undergo reaction into the shafts, heating the material in the preheating zone, introducing a current of primary air in to the top of the first shaft, feeding in cooling air in counter-flow from the bottom of the cooling zone in one or both shafts and feeding fuel gas into the combustion zone at more than one position so that a portion of the fuel gas burns only with the cooling air.

CLASS 172-E.

131435.

TRAVERSE DRUM FOR USE IN WINDING MACHINES.

NATVERLAL PURSHOTTAMDAS KINARIWALA, OF 148, GARDEN AREA, MANINAGAR, AHMEDABAD 8, STATE OF GUJARAT, INDIA.

Application No. 131435 filed May 20, 1971.

13 Claims.

A traverse drum adapted for use in winding machines for winding yarn or like strandular materials into packages comprising a moulded roll or a drum having a plurality of traverse grooves formed thereon, said grooves having apex locations and cross over locations, a central bore extending longitudinally of said drum and adapted to be mounted on and held to a shaft of said winding machine, a metal reinforcement provided at each of cross over location and at the apex locations of said grooves characterized in that at least one relating element is provided within the body of said drum said retaining element being in contact with at least one reinforcement element provided at the cross over location of a groove and retaining the said reinforcement element in position.

CLASS 172-E.

131436

TRAVERSE DRUM FOR USE IN WINDING MACHINE

NATVERLAL PURSHOTTAMDAS KINARIWALA OF 148 GARDEN AREA, MANINAGAR, AHMEDABAD-8, STATE OF GUJARAT, INDIA.

Application No. 131436 filed May 20, 1971.

5 Claims

A traverse drum adapted for use in winding machines for winding yarn or like strandular materials into packages comprising a cylinder or roll made of a moulded non-connecting material and having a plurality of traverse grooves formed thereon, a central bore extending longitudinally of said roll and adapted to be mounted on and held to a shaft of said winding machine, characterized in that at least one conductor plate is provided on the outer surface of said roll, said plate having an electrical connection with said shaft whereby the static charge absorbed on the outer surface of that portion of said roll which is covered by said conductor plate travels through said plate to said shaft.

CLASS 87-I

TOY BUILDING ELEMENT CONSTRUCTION.

JOSEF BUCHELI, OF BUSENHARDSTRASSE 11 HERLBERG, SWITZERLAND.

Application No. 131524 filed May 28, 1971.

## 16 Claims

A toy building element which is cooperative with a plurality of other elements of the same and different nature for producing an operative device or structure comprising a clamping element having first and second arms, means pivotally interconnecting said arms intermediate their lengths, a spring connected between the common ends of said first and second arms and having a ring-shaped portion defining an elastic receiving opening for another building element the opposite common ends of said arms defining a clamping jaw which is closed by said arms, under the biasing of said spring.

CLASS 208

131630

## IMPROVEMENTS IN OR RELATING TO FOUNTAIN PENS

CHAVALA ETHIRAJIAH, OF 562, POONAMALLI HIGH ROAD, MADRAS-3 TAMIL NADU, INDIA.

Application No. 131630 filed June 7, 1971.

## 7 Claims

A fountain pen comprising a barrel having internally threaded mouth, a neck and a threaded sleeve projecting from the neck and adapted to be screwed on to the said mouth, the length of the neck being shortened in comparison with the conventional neck so that the joint between the said neck and the barrel is sufficiently close to the tip of the nib and the pen can be held in the normal writing position without the fingers contacting the said line of joint and can not be held while writing by its neck.

CLASS 62-C-1 &amp; 154-H

131644.

## PROCESS FOR THE MANUFACTURE OF LEVEL FAST DYEINGS ON NATURAL OR SYNTHETIC FIBROUS

## MATERIALS CONTAINING NITROGEN

FARBWERKE HOECHST AKTIENGESellschaft VORMALS MEISTER LUCIUS & BRUNING, OF 45, BRUNINGSTRASSE, FRANKFURT/MAIN, FEDERAL REPUBLIC OF GERMANY

Application No. 131644 filed June 8 1971.

## 6 Claims—No drawings

A process for the manufacture of level fast dyeings on natural or synthetic fibrous materials containing nitrogen such as wool, silk, leather, polyamide or polyurethane fibres wherein the said fibrous material is treated with 1:2-chromium or 1:2 cobalt complex mono azo dyestuffs which are free from acid, water-solubilizing groups but which contain at least one hydrophilic group  $-SO_2-CH_2-CH_2-OH$  at a pH of from 4 to 8.

CLASS 196B-2.

131731.

## DEVICE FOR MAINTENANCE OF A DUSTFREE, BACTERIAFREE ZONE IN A ROOM

AKTIEBOLAGET SVENSKA FLAKTFABRIKEN, OF SICKLA ALLE, NACKA, SWEDEN.

Application No. 131741 filed June 15 1971.

## 4 Claims

Device for maintenance of a dustfree and bacteriafree zone in a room by means of a number of air curtains surrounding the zone under simultaneous supply of ventilating air to the curtained-off zone, said device having means for a uniform distribution of the ventilating air supplied within the zone, while the means for producing air curtains surrounding the zone consist of one or more exhaust nozzles situated one beside the other so as to produce a corresponding number of air curtains, the air of which then being discharged together with the ventilating air supplied to the zone, said exhaust nozzles being placed in a wall, facing the zone, of a distributing channel surrounding the zone and having a number of sides, preferentially straight sides, delimiting the

zone the nozzles meeting in a corresponding number of corners, characterized in that an impulse means is arranged to separately produce a preferably rather more powerful jet of air in each corner between the pairwise meeting exhaust nozzles for blancing, by ejector action, of the forces of contraction of two adjacent sides of the air curtain and for ensuring an unbroken air curtain around the zone also in the corners.

CLASS 196B-1+2.

131732.

## DISTRIBUTING DEVICE IN PLANTS FOR THE MAINTENANCE OF A DUSTFREE, BACTERIAFREE ZONE IN A ROOM

AKTIEBOLAGET SEVENSKA FLAKTFABRIKEN, OF SICKLA ALLE 1, OF NACKA SWEDEN.

Application No. 131732 filed June 15, 1971.

## 6 Claims

Distributing device in plants for the maintenance of a dust-free and bacteriafree zone in a room by means of a number of air curtains surrounding the zone under simultaneous supply of ventilating air to the room within the curtained-off zone, the ventilating air then being discharged together with the air curtains, characterized by means for a uniform distribution and direction of the ventilating air supplied within the zone at moderate rates of air flow, the means consisting of an inlet air channel terminating in a chamber of known type with an area essentially corresponding to that of the zone and containing a perforated plate covering the entire area of the chamber, said plate being comparatively thick and having a low degree of perforation and a plate, likewise covering the entire area of the chamber, constituting the limiting surface facing the zone, preferably with high degree of perforation and comparatively thin while the means for producing the air curtains surrounding the zone consist of a separate distributing channel extending in a known manner around said chamber and being connected to a separate inlet air channel, the distributing channel having on its surface facing the room one or more exhaust nozzles, situated one beside the other so as to produce a corresponding number of air curtains.

CLASS 34-A, 172-F

131747.

## PROCESS FOR THE PRODUCTION OF COMPOSITE YARNS, APPARATUS SUITABLE FOR REALISING THE SAME AND YARNS OBTAINABLE THEREBY

SNAM PROGETTI S. P. A., OF 16 CORSO VENEZIA, MILANO, ITALY.

Application No. 131747, filed June 16, 1971.

## 22 Claims

A process for the production of a yarn formed from a plurality of composite filaments each formed of two or more homopolymers and/or copolymers having different physical or chemical properties, which process comprises; drawing the yarn; separating the drawn yarn into single filaments using an electric device; contacting the filaments with an air stream moving in the same or substantially the same direction as the filaments, which causes further separation of the filaments; then subjecting the separated filaments to a thermal shock at a temperature in the range from 200 to 600°C.; maintaining the thermally shocked filaments at a decreasing temperature having an initial value in the range from 200 to 600°C., for a time sufficient to develop further crimping; and collecting the resulting composite yarn.

CLASS 136-C.

131800.

## PROCESS AND APPARATUS FOR THE CONTINUOUS PRODUCTION OF EXTRUDED SECTIONS

BAYER AKTIENGESellschaft FORMERLY KNOWN AS FARBENFABRIKEN BAYER AKTIENGESellschaft OF I EVERKUSEN, FEDERAL REPUBLIC OF GERMANY.

Application No. 131800 filed June 19 1971.

## 14 Claims

A process for the continuous production and/or covering of extruded sections in which a plasticised synthetic plastics

material is supplied to an extruder nozzle and is extruded therethrough, the said plasticised synthetic plastics material first flows around the annular passage surrounding the extruder nozzle from outside, is then guided through an annular slot in a direction opposite to the direction in which the section is to be extruded, and thereafter is deflected into a duct of the extruder nozzle and, if desired introducing the extruded section into a bore of the extruder nozzle and covering said extruded section with the plasticised synthetic plastics material flowing around the annular passage surrounding the extruder nozzle.

CLASS 172-D-6.

131817

## THREE ROLLER HIGH DRAFTING SYSTEM

INDUSTRIEWERK SCHAEFFLER OHG, OF 8522 HERZOGENAURACH, WEST GERMANY.

Application No. 131817 filed June 21, 1971.

## 4 Claims

Three roller high drafting system for spinning machines, in which the fibre compound passes through a break draft zone between the feed roller pair and the middle or apron roller pair and a main draft zone with a double apron mechanism between the apron roller pair and the front or delivery roller pair, wherein the bottom feed roller is placed higher than the drafting plane by approximately half its diameter and whereby the top feed roller is set back to the rear in relation to the bottom feed roller by such an amount that the fibre control of the spinning material is achieved by an increased angle of contact with the bottom feed roller, and that the total length of path of the spinning material between the nips of the feed roller pair and the middle or apron roller pair is longer than the staple length, and that the uncontrolled length of path of the spinning material between these roller pairs is shorter than the staple length characterised in that the top feed roller is supported by an additional supporting roller.

CLASS 206-E.

131822.

## METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE AND SEMICONDUCTOR DEVICE OBTAINED BY USING THE METHOD

N. V. PHILIPS' GLOEILAMPENFABRIEKEN, AT EMMASINGEL-29, EINDHOVEN, HOLLAND.

Application No. 131822 filed June 21, 1971.

Addition of Addition to No. 112588.

## 10 Claims

A method of manufacturing a semiconductor device comprising a semiconductor body of silicon having at least one semiconductor circuit element in behalf of which a silicon oxide layer which adjoins the silicon body is provided in the form of a layer-shaped pattern of silicon oxide and by means of an oxidation treatment at the surface of the silicon body, in which the layer-shaped pattern is sunk in the silicon body for at least part of its thickness by locally masking, during the oxidation treatment the surface of the silicon layer against oxidation and, in which a semiconductor body is used in the form of an epitaxial silicon layer of the one conductivity type which is present on a support of the opposite conductivity type, the oxidation treatment during providing the layer shaped pattern of silicon oxide being continued until the pattern extends throughout the thickness of the epitaxial silicon layer, the silicon layer being divided into a number of parts, hereinafter termed islands, which are separated from each other by the pattern characterized in that a semiconductor body which is used as the starting material and of which during providing the epitaxial layer at least a surface region serves as the support of the opposite conductivity type is provided with a surface zone of the opposite conductivity type belonging to the support and adjoining the layer-shaped oxide pattern, and having such a high doping that the formation of channels which connect islands, and which adjoin the insulating layer-shaped pattern is prevented.

CLASS 94-G.

131982.

## A GRINDING MILL SYSTEM

KENNEDY VAN SAUN CORPORATION, AT BEAVER STREET, DANVILLE, STATE OF PENNSYLVANIA, UNITED STATES OF AMERICA.

Application No. 131982 filed July 3, 1971.

## 5 Claims

In a grinding mill system of the type utilized for grinding various solid materials and including a grinding mill, a motor driven feeder for supplying material to the mill, a classifier for classifying the ground product of the mill and a conduit for conveying the classifier reject or oversize ground material from the classifier to the feed inlet of the mill, wherein the improvement comprises: (a) mechanism mounted on the conduit for oversize ground material responsive to changes in the rate of flow of oversize solid material through the conduit to the feed inlet of the mill, (b) said responsive mechanism comprised a pivot shaft, a vane fixed to the pivot shaft and having a movable portion overlying and lightly resting on the stream of oversize solid material flowing through the conduit, (c) means responsive to the movement of said vane and shaft caused by variations in the rate of flow of the oversize solid material in the conduit and actuated by the shaft for producing a variable electrical signal for controlling the rate at which the feeder delivers solid material to be ground to the inlet end of the mill to decrease the feed rate as the rate of flow of oversize solid material increases and to increase the feed rate as the rate of flow of oversize solid material through the conduit decreases, and wherein the means for producing said signal comprises a rotary position transmitter a potentiometer in the transmitter for producing an output signal, and means connected to the shaft for actuating the potentiometer.

15-C.

132009.

## A METHOD OF MANUFACTURING A BUSHED RECEPTACLE ASSEMBLY AND A BUSHED RECEPTACLE ASSEMBLY SO MANUFACTURED

GIDDINGS & LEWIS INC. OF 142 DOTY STREET, FOND DU LAC, WISCONSIN 54935, UNITED STATES OF AMERICA.

Application No. 132009 filed July 6, 1971.

## 6 Claims

A method for manufacturing a bushed receptacle assembly in which a bush defining one of a plurality of index stations in a first machine tool element is located with respect to a shot pin locating means in a second relatively movable tool element comprising the steps of forming a bore in the first element in a position corresponding to the intended position of the shot pin locating means of second element and having an internal axial locating element inserting a bush in the bore said bush having a locating end surface engageable with the locating element within the bore, an internal precision locating surface adapted to receive and position the shot pin locating means and an external diameter smaller than the bore by an amount which is at least twice the maximum locational error tolerance of the bore; assembling the machine tool elements with the bush loosely retained in the bore to define a clearance volume between the bush and the bore; shifting the shot pin locating means into engagement with the bush locating surface with the machine tool elements retained in a precisely determined intended locational position, corresponding to said one index station of the first machine tool element and injecting a hardenable liquid cementing medium into the clearance volume and allowing the cementing medium to harden.

CLASS 6-A-3.

132027.

## MOTOR COMPRESSOR UNIT

CARRIER CORPORATION, SYRACUSE, NEW YORK UNITED STATES OF AMERICA.

Application No. 132027 filed July 8 1971.

## 6 Claims

A hermetically sealed motor-compressor unit of the type employed in a mechanical refrigeration system having a suspension system for mounting the unit in its shell comprising support members affixed to the inner surface of said shell

and located in spaced relation relative to each other; resilient means connecting each of said support members and said motor-compressor unit for yieldably suspending said unit in the shell and stop means to prevent said motor-compressor unit from moving in an excessive amount either vertically upwardly or vertically downwardly in the shell, said stop means being located at suitable positions on the unit and on the shell.

CLASS 6-A-3.

132028

# A CYLINDER BLOCK FOR A MOTOR COMPRESSOR UNIT HAVING DISCHARGE MUFFLING MEANS

CARRIER CORPORATION, AT SYRACUSE, NEW YORK, UNITED STATES OF AMERICA.

Application No. 132028 filed July 8, 1971.

## 4 Claims

A cylinder block for a hermetic motor-compressor unit operable to provide high pressure gas including means defining a cylinder, wall means including first, second and third members spaced from said cylinder defining means, said first and second members being approximately parallel with respect to each other, and said third member being approximately perpendicular to and connecting said first and second members, said wall and cylinder means defining a space therebetween, said third member separating said space into a plurality of serially connected, silencer chambers; passage means provided for communicating said cylinder with a portion of said space for passage of gas discharged from said cylinder into said space, the gas passing through said serially connected silencer chambers to attenuate the sound caused by the pulsating characteristic of the discharge gas; and means defining a discharge conduit connected to said space for discharging the gas from said cylinder block.

CLASS 6-A-3

132029

# HERMETIC MOTOR COMPRESSOR UNIT

CARRIER CORPORATION, AT SYRACUSE, NEW YORK, UNITED STATES OF AMERICA.

Application No. 132029 filed July 8, 1971.

## 3 Claims

A hermetic motor-compressor unit including a compressor body, a crankshaft disposed within the compressor body for rotation therein, a piston disposed in a cylinder and connected to an eccentric portion of the crankshaft by a connecting rod and a wrist pin, and a cylinder head for the cylinder having integrally formed suction gas muffling means including a member having a wall whose interior surface defines a cavity; a transverse baffle member separating the cavity into a first section and a second section; means defining a suction gas inlet into the first section; means defining an orifice through said transverse baffle member to communicate said first section with said second section and a second baffle member disposed in said second section and separating said second section into first and second portions, said first portion receiving suction gas supplied from said first section through said orifice and said second portion receiving high pressure gas after it has been compressed by the operation of the motor-compressor unit, said first portion having alternate relatively restricted and relatively expanded areas to attenuate sound caused by the pulsating characteristic of the suction gas.

CLASS 118, 134-C, 158E3 and 160-C.

132030

# IMPROVEMENTS IN VEHICLE SUSPENSION SYSTEMS.

DUNLOP HOLDINGS LIMITED OF DUNLOP HOUSE, RYDER STREET, ST. JAMES'S, LONDON, S. W. 1, ENGLAND

Application No. 132030 filed July 8, 1971.

Convention date July 9, 1970 (33315/70) U.K.

## 16 Claims

A vehicle suspension comprising an axle support member provided with a primary suspension system and a secondary

suspension system, the primary suspension system comprising suspension elements to permit an axle to be attached resiliently to the axle support member, and the secondary suspension system comprising elements of elastomeric material to permit the axle support member to be attached resiliently to a vehicle body so as to allow angular movement of the axle support member about the vertical axis of the vehicle body.

CLASS 32B+F-1-2

132270

# PROCESS FOR PREPARING OPTICALLY ACTIVE 1, 4-BENZODIAZEPIN-2-ONE DERIVATIVES AND SALT THEREOF.

RICHTER GEDEON VFGYFSZETI GYAR R. T., OF 21, GYOMROI UT, BUDAPEST X, HUNGARY.

Application No. 132270 filed July 27, 1971.

## 3 Claims

A process for producing optically active 1, 3, 4, 5-tetrahydro-1, 4-benzodiazepin-2-one derivatives of the general formula I shown in the accompanying drawings wherein R represents a hydrogen atom or an alkyl group having 1 to 5 carbon atoms and X represents a hydrogen or halogen atom, or a nitro or trifluoromethyl group, which comprises reacting a racemic 1, 3, 4, 5-tetrahydro-1, 4-benzodiazepin-2-one derivative of the general formula I, wherein the R and X have the same meaning as above with an optically active organic acid such as herein described and separating the diastereomeric salts and recovering the optical antipodes by known methods.

CLASS 33A

132332

# A PLANT FOR THE CONTINUOUS CASTING OF METAL.

VSESOJUZNY NAUCHNO-ISSLEDOVATELSKY I PROEKTNO-KONSTRUKTORSKY INSTITUT METALLURGICHESKOGO MASHINOSTROENIYA, OF 1 GORODSKAYA ULITS A 10, MOSCOW, U.S.S.R.

Application No. 132332 filed August 2, 1971.

## 5 Claims

A plant for the continuous casting of metal comprising a support; a rotary mould fastened on it and provided with an annular slot formed in a tire; an endless metal belt encompassing partially the tire of said mould; a roller secondary cooling device set up between said mould and downward branch of said endless metal belt characterised by the provision of a wedge for detaching an ingot from the endless belt mounted in front of said secondary cooling device in the direction of the mould rotation; a transfer gear of said secondary cooling device intended for holding the ingot tight to the mould fastened to said support.

CLASS 32-A, 62-C-1, 154-H.

132355

# PROCESS FOR THE PREPARATION OF WATER-SOLUBLE MONOAZO DYESTUFFS

FARBWERKE HOECHST AKTIENGESELLSCHAFT VORMALS MEISTER LUCIUS & BRUNING, OF 45, BRUNINGSTRASSE, FRANKFURT/MAIN, FEDERAL REPUBLIC OF GERMANY.

Application No. 132355 filed August 3, 1971.

## 14 Claims

A process for the preparation of water-soluble reactive monoazo dyestuffs of the general formula (1) of the accompanying drawings in which A stands for the radical of a coupling component capable of coupling owing to the presence of a phenolic, naphthelic or enolic hydroxy group or a primary, secondary or tertiary amino group, B stands for the radical of a diazo component of the benzene or naphthalene series, R stands for a hydrogen atom, an alkyl having 1 to 4 carbon atoms, cycloalkyl, aralkyl or aryl group which may be substituted by a hydroxy, alkyl, alkoxy, carboxy or sulfo group or by a halogen atom, R<sub>1</sub> stands for an alkylene radical of 1 to 4 carbon atoms, Y stands for the grouping -CH<sub>2</sub>-CH<sub>2</sub>-Z or -CH=CH<sub>2</sub>, in which Z stands for an

inorganic or organic radical capable of being split off by an alkaline agent or a hydroxy group, X stands for the bridging member -CO- or -SO-, D stands for a direct bond or the group of the formula (1-a), (1-b), (1-c) or (1-d) wherein X and R have above given meanings, the grouping -D-X-N-R, -SO<sub>2</sub>-Y being linked to A and/or B, m stands for O or an integer of from 1 to 6 and n for an integer of from 1 to 3, which process comprises coupling a diazonium compound of an aromatic amine of the general formula (2) in which B, D, X, R, R<sub>1</sub> and Y are defined as above, m<sub>1</sub> stands for O or an integer of 1 to 6 and n<sub>1</sub> for O or an integer of 1 to 3, with a coupling component of the general formula (3) in which A, D, X, R, R<sub>1</sub> and Y are defined as above, m<sub>2</sub> stands for O or an integer of 1 to 6 and n<sub>2</sub> for O or an integer of 1 to 3, the coupling component and the diazo component chosen being such that the sum of m<sub>1</sub> and m<sub>2</sub> is at most 6, the sum of n<sub>1</sub> and n<sub>2</sub> at least 1 and at most 3.

CLASS 32-E.

132434

MODIFIED POLYMERS AND PROCESS FOR PRODUCING THE SAME.

SNAM PROGETTI S.P.A., 16 CORSO VENEZIA, MILANO, ITALY.

Application No. 132434 filed August 9, 1971.

#### 10 Claims

A process for preparing a modified polymer, which comprises reacting an organic polymer such as herein described in a solvent and in the presence of an anti-oxidant and at a temperature ranging from 40 to 200°C with an unsaturated compound having the formula X<sup>1</sup>-Y<sup>1</sup>-Y<sup>2</sup>-X<sup>2</sup> wherein either both Y<sup>1</sup> and Y<sup>2</sup> are nitrogen atoms with a double bond therebetween or both Y<sup>1</sup> and Y<sup>2</sup> are carbon atoms either with a triple bond therebetween or with a double bond therebetween, in which case Y<sup>1</sup> bears an extra group X<sup>3</sup> and Y<sup>2</sup> bears an extra group X<sup>4</sup>, and wherein each of X<sup>1</sup>, X<sup>2</sup>, X<sup>3</sup> and X<sup>4</sup>, which may be the same or different, is a hydrogen atom or an electronegative group selected from -COOH, -COOR<sup>1</sup>, -CN, -CHO, -CONH<sub>2</sub>, -SO<sub>2</sub>H and -CH<sub>2</sub>Cl, R<sup>1</sup> being an alkyl or an aryl radical, with the proviso that not both of X<sup>1</sup> and X<sup>2</sup> are hydrogen atoms; or, in the case when Y<sup>1</sup>-Y<sup>2</sup> is a carbon-carbon double bond, two cis-substituents may together form a divalent radical so as to form a ring.

CLASS 107-K.

132460

DELIVERY VALVES FOR USE IN LIQUID FUEL PUMPING APPARATUS.

C. A. V. LIMITED, OF WELL STREET, BIRMINGHAM 19, ENGLAND

Application No. 132460 filed August 11, 1971.

Convention date August 27, 1970 (41231/70) U.K.

#### 5 Claims

A delivery valve of the kind specified comprises in combination, a cylindrical member slidable within a bore of a valve housing between a pair of abutments said bore constituting part of the flow passage from the injection pump to the associated engine, and valve means contained within the member and disposed to open when the member has been moved a predetermined amount by the flow of fuel during an injection stroke of the injection pump towards one of said abutments, said valve means opening to allow continued flow of fuel during the injection stroke but closing at the end of the injection stroke, the member then moving into contact with the other abutment thereby allowing a predetermined quantity of fuel to flow back towards the injection pump.

CLASS 24-B+E.

132556

IMPROVEMENTS IN OR RELATING TO VEHICLE BRAKES.

GIRLING LIMITED KINGS ROAD, TYSELEY, BIRMINGHAM 11, ENGLAND.

Application No. 132556 filed August 18, 1971.

Convention date August 24 1970 (40573/70) U.K.

#### 5 Claims

A brake of the class specified, comprising a handbrake applying lever forming part of the manually actuated auxi-

liary brake means, common pivoted mounting means for mounting the lever and the pawl on one of the brake shoes for pivotal movement relative thereto, the pawl being mounted on the common mounting means in a manner permitting the pawl to rock about an axis transverse to that of the mounting means pawl spring means, constantly urging the pawl to pivot in a sense to effect adjustment of the strut and biasing means biasing the pawl about the rocking axis into engagement with the ratchet wheel, the spring exerting on the pawl a force intermediate that required to effect adjustment when the strut is loaded by the shoe return spring means and that required when the strut is relieved of load by actuation of the service brake means.

CLASS 99-F and 136-E.

132569

METHOD FOR MOLDING LAMINATED STRUCTURES FROM POLAR AND NON-POLAR MACROMOLECULAR MATERIALS AND ARTICLES OBTAINED BY SUCH METHOD.

VAESSEN-SCHOEMAKER HOLDING N. V. OF SINGEL 5, DVENTER (THE NETHERLANDS).

Application No. 132569 filed August 18, 1971.

#### 11 Claims—No drawings

Process for integrally connecting the surfaces of polar and non-polar thermoplastics, characterized in that said surfaces are connected with a layer of a polyolefine between them, the said polyolefine having a halogen content of 0.2-5 wt %.

CLASS 195-A+C.

132574

IMPROVEMENTS IN BALL VALVE SEATING ASSEMBLIES.

SAUNDERS VALVE COMPANY LIMITED OF GRANGE ROAD, CWMBRAN, MONMOUTHSHIRE, ENGLAND.

Application No. 132574 filed August 19, 1971.

Convention date August 26, 1970 (41010/70) U.K.

#### 4 Claims

A ball valve of the type having a ball with a flow passage therethrough, the ball being rotatably mounted intermediate two bores in a valve casing to position the ends of the flow passage in relation to the bores to provide a desired degree of communication between the bores, a seating ring of extrudable material being disposed between the ball and valve casing in respect of each bore and urged into sealing contact with the ball by spring-urged backing rings having conical surfaces confronting similar conical surfaces of the seating rings wherein the confronting conical surfaces of at least one of the co-operating backing and sealing ring pairs are so shaped as to be separated over a major part of their axial extent by a gap which tapers in a direction away from the ball.

CLASS 4A-4.

132577

AIRCRAFT ARRESTING DEVICE.

BORGES FABRIKS AKTIEBOLAG, OF NORRKOPING, SWEDEN.

Application No. 132577 filed August 19, 1971.

#### 6 Claims

An aircraft arresting device of the type hereinbefore described in which the section of the braking lines which is first removed from the storage means when the device is used to arrest an aircraft is stronger and heavier per unit length than the remainder of the braking line.

CLASS 34A.

132658

POLYESTER FIBRES WITH IMPROVED MOISTURE REGAIN.

IMPERIAL CHEMICAL INDUSTRIES LIMITED, OF IMPERIAL CHEMICAL HOUSE, MILBANK, LONDON, S.W. 1, ENGLAND.

Application No. 132658 filed August 25, 1971.

Convention date August 24, 1970 (40573/70) U.K.

#### 5 Claims—No drawings

An aromatic polyester fibre containing dispersed particles of sodium sulphate.



CLASS 70A+C-2.

132698

## PLANT FOR THE PRODUCTION OF ALUMINIUM BY ELECTROLYSIS OF ALUMINA IN A MELT.

SWISS ALUMINIUM LTD. OF CHIPPIS (CANTON OF VALAIS), SWITZERLAND.

Application No. 132698 filed August 28, 1971.

## 1 Claim

A plant for the production of aluminium by electrolysis of alumina in a melt which constitutes the electrolyte comprising a plurality of cells in series, each cell comprising a pot having a bottom in which are a plurality of like cathode bars which each extend to at least one terminal outside the pot, and an anode beam carrying anodes arranged to dip into melt in the pot and electrical connecting means between each cell and the next in the series, each connecting means comprising a plurality of cathode bus bars each of which connects a respective group of at least one of the cathode bar terminals of one cell to the anode beam of the next cell, the cross sections of the individual bus bars being such that, when an equal current flows through each cathode bar, then the voltage drop is the same along each bus bar from the respective bar terminal nearest to the anode beam to a point midway along the anode beam.

CLASS 70-A+C-2.

132699

## ELECTROLYTIC CELLS FOR MANUFACTURE OF ALUMINIUM.

SWISS ALUMINIUM LTD. OF CHIPPIS (CANTON OF VALAIS), SWITZERLAND.

Application No. 132699 filed August 28, 1971.

## 3 Claims

An electrolytic cell for the production of aluminium by electrolysis of alumina in a melt which constitutes the electrolyte, comprising: a pot body of steel, a layer of thermal and electrical insulation against the inside of the body, a lining of carbon against the inside of the insulation layer, the body, the layer, and the lining each consisting of a bottom, two side walls and two end walls, iron cathode bars each having at least a part within the bottom of the lining, a part beneath a side wall of the lining, and a part passing through a side wall of the insulation layer and through a side wall of the body, and anodes arranged to dip into electrolyte in the pot, wherein the horizontal distance between outer lower edges of the anodes and adjacent wall surfaces of the lining does not exceed 40 cm, the thermal resistance of the walls of the insulation layer is between  $0.5 \times 10^3$  h °C and  $1 \times 10^3$

$\frac{\text{h } ^\circ\text{C}}{\text{k cal}}$ , the parts of the cathode bars beneath the side wall of the lining are surrounded by insulation, and the ratio of iron cross section to carbon cross section in any vertical plane from end to end of the cell through the bottom of the lining is between 17 : 100 and 20 : 100.

CLASS 32-A<sub>1</sub>, 62-C<sub>1</sub>.

132833.

## PROCESS FOR THE MANUFACTURE OF NEW DISAZO PIGMENTS.

CIBA-GEIGY AG, OF 141 KLYBECKSTRASSE, BASEL, SWITZERLAND.

Application No. 132833 filed September 8, 1971.

## 7 Claims

A process for the manufacture of disazo pigments of the formula I of the accompanying drawings, in which *a* represents a substituted arylene radical *R* represents an alkyl group having 1 to 4 carbon atoms and *X* represents a hydrogen or a halogen atom, wherein a diazo or diazoamino compound of an aminoterephthalic acid dialkyl ester of the formula 2, is coupled by known methods as herein defined with a diacetoacetyl-arylenediamine of the formula  $\text{CH}_3\text{COCH}_2\text{A-NHOCCH}_2\text{COCH}_3$  in the molar ratio 2 : 1.

L177GI/73

CLASS 55-D-2.

132880

## METHOD OF PREPARING ALKOXY DINITROANILINE COMPOUNDS.

UNITED STATES BORAX &amp; CHEMICAL CORPORATION, OF 3075 WILSHIRE BOULEVARD, LOS ANGELES, CALIFORNIA, UNITED STATES OF AMERICA.

Application No. 132880 filed September 13, 1971.

Convention date July 26, 1971 (34889/71) U.K.

## 9 Claims

A method of preparing a compound of formula 1 of the accompanying drawings, in which *R*<sub>1</sub> is alkyl of at least 2 carbon atoms, alkenyl, alkenyl or aryl and *R*<sub>2</sub> is hydrogen, alkyl alkenyl, or alkynyl or *R*<sub>1</sub> and *R*<sub>2</sub> together represent a chain including 2-6 carbon atoms which with the nitrogen atom form a heterocyclic group *R*<sub>3</sub> is alkyl of up to 6 carbon atoms, *Y* is oxygen or sulphur, and *Z* is alkyl of up to 6 carbon atoms, halo, or trifluoromethyl, which comprises reacting in substantially equimolar amounts an alkali metal alkoxide or an alkali metal thioalkoxide and the 3-halo-2, 6-dinitro aniline corresponding to the desired compound.

CLASS 83-A<sub>1</sub>.

132952

## FISH PROTEIN ISOLATE.

NESTLE'S PRODUCTS LIMITED OF NESTLE HOUSE, COLLINS AVENUE, NASSAU, BAHAMAS.

Application No. 132952 filed September 17, 1971.

Convention date September 23, 1970 (45311/70) U.K.

## 20 Claims—No drawings

A process for isolating protein from fish material which comprises treating the fish with alkali in an aqueous medium at a temperature of 90 to 120°C for not more than about five minutes, the alkali concentration in the medium being between 0.02 and 0.5 N whereby a substantial portion of the protein present in the fish is solubilised, adjusting the pH of the medium to a value of about 7 to 10, removing insoluble matter from the medium, removing the lipids as herein defined present by liquid-liquid extraction with a solvent for the liquids and recovering the protein from the solution in a manner such as herein described.

CLASS 42-D.

132974

## IMPROVEMENTS RELATING TO TOBACCO-SMOKE FILTERS AND TO A METHOD AND AN APPARATUS FOR THEIR PRODUCTION.

BRITISH-AMERICAN TOBACCO COMPANY LIMITED, OF WESTMINSTER HOUSE 7, MILBANK, LONDON, S.W. 1, ENGLAND.

Application No. 132974 filed September 20, 1971.

Convention date October 7, 1970 (47707/70) U.K.

## 12 Claims

A method of producing a tobacco-smoke filter, wherein a tobacco-smoke filter foam material such as herein described is intermittently injected with one or more additives such as herein described at intervals while being extruded in rod form.

CLASS 116G &amp; 125B-1.

132990

## A DEVICE FOR DIVERTING DOWNWARD FLOW OF PARTICULATE MATERIAL.

SHERRITT GORDON MINES LIMITED 25 KING STREET WEST, TORONTO, ONTARIO, CANADA.

Application No. 132990 filed September 21, 1971.

Convention date October 1, 1970 (094,533) Canada.

## 7 Claims

A device for diverting the vertically downward flow of particulate material comprising, in combination, substantially upright chute means having a wall in which is formed an opening, gate means inclined from the horizontal at an angle greater

than the angle of repose of the material flowing through the upright chute means and positioned to extend slidably from an inoperative position in which said gate means is outside said chute means and spans none of the cross-sectional area of the upright chute means to an operative position in which said gate means is within said chute means and spans the entire cross-sectional area of the upright chute means and thereby serves to divert the flow of particulate material from a vertically downward direction to a direction along the gate means and to said opening, second chute means in communication with said opening when said gate means is in the operative position and receiving diverted material and actuating means for extending the gate means across the upright chute means to the operative position in order to divert the entire flow of material from the upright chute means to the second chute means.

CLASS 116C.

133043

# IMPROVEMENTS IN PASSENGER CONVEYOR LANDING.

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO U.S.A. AND A POST OFFICE ADDRESS AT 1144 EAST MARKET STREET, AKRON, OHIO, U.S.A.

Application No. 133043 filed September 24, 1971.

4 Claims

An inclined belt type passenger conveyor having an endless belt extending at an angle to the horizontal a terminal pulley for supporting said belt at the lower end of said conveyor, said belt being movable down the conveyor to said terminal pulley where said belt bends inwardly around said terminal pulley, said belt having a load carrying surface a landing plate structure located at said terminal pulley and having an upper load carrying surface of said landing plate structure upper load carrying surface with an upper edge portion, said being in alignment with said load carrying surface of said belt whereby said upper edge portion is located within the space below the plane of said load carrying surface of said belt and above the belt at a position after the belt is bent inwardly around said terminal pulley to facilitate a smooth transition of passenger between the surfaces of the belt and the landing plate structure, said landing plate structure having a horizontal lower portion and an intermediate curved portion between said upper edge portion and said horizontal lower portion to provide a smooth transition of passengers and objects between said load carrying surface belt and said horizontal lower portion of said landing plate structure.

CLASS 69F, K. &amp; N.

133135

# SWITCH-DISCONNECTOR.

ALLMANNA SVENSKA ELEKTRISKA AKTIEBOLAGET, OF VASTERAS, SWEDEN.

Application No. 133135 filed October 6 1971.

7 Claims

Switch-disconnector comprising a main contact and at least two arcing contacts, said main contact comprising a movable isolator blade and a stationary counter contact member, said arcing contacts connected in series with each other and comprising two stationary arcing contact members spaced from each other in an arc chute said stationary arcing contact members being bridged by a movable arcing contact member in the closed position of the switch-disconnector, said movable arcing contact member being carried by a movable isolation part and mechanically connected to the isolator blade, one stationary arcing contact member being electrically connected to said counter contact member of the main contact, and the second stationary arcing contact member being connected to the isolator blade through a series sliding contact, characterised in that the series sliding contact comprising two cooperating contact bars, one of which is stationary arranged on the outside of the arc chute while the other is arranged to move with the isolator blade in such a way that the series sliding contact is open at least during a critical part of a closing operation to prevent a pre-arc from arising in the arc chute.

CLASS 69-E G. I &amp; I.

133492

# ELECTRIC SWITCHES.

JOSEPH LUCAS (INDUSTRIES) LIMITED, OF GREAT KING STREET, BIRMINGHAM 19, ENGLAND.

Application No. 133497 filed November 5, 1971.

Convention date November 10, 1970 (53369/70) U.K.

15 Claims

An electric switch comprising a body, a cam element rotatable within the body and formed with a helical track at an increasing radius from the cam axis, a fixed contact on the body, a carrier slidable within the body transversely of the axis of the cam, an abutment on the carrier engaging the track, a further contact mounted on the carrier, first biasing means urging the further contact away from the fixed contact, second biasing means urging the cam element in an axial direction to engage the abutment and means both for rotating the cam and for moving it axially against its associated biasing means.

CLASS 48A-1.

133639

# IMPROVEMENTS RELATING TO ELECTRIC CABLES.

INDUSTRIE PIRELLI SOCIETA PER AZIONI, OF CENTRO PIRELLI, PIAZZA DUCA D'AOOSTA 3, MILAN, ITALY.

Application No. 133639 filed November 16, 1971.

10 Claims

An electric cable having an insulated core enclosed in a metal sheath and a protective layer surrounding the metal sheath the protective layer including a corrugated metal ribbon extending longitudinally of the cable and wrapped around the metal sheath.

CLASS 114-F.

133644

# PROCESS FOR RETANNING AND FATLIQUORING LEATHER.

BADISCHE ANILIN-&-SODA-FABRIK AKTIENGESELLSCHAFT AT 6700 LUDWIGSHAFEN, FEDERAL REPUBLIC OF GERMANY.

Application No. 133644 filed November 16, 1971.

4 Claims—No drawings

A process for retanning and fatliquoring leather which has been tanned with chrome or vegetable tanning materials, by treating said tanned leather with retanning materials such as herein described fatliquoring agents such as herein described and, optionally, wetting agents and dyes such as herein described, characterised in that the said retanning materials, fatliquoring agents and optionally, wetting agents and dyes are contacted with the leather exclusively on its grain side only.

CLASS 32-F-2-b.

134034

# PROCESS FOR THE PRODUCTION OF BIS-TRIAZOLE COMPOUNDS.

SANDOZ LTD, OF LICHTSTRASSE 35, BASLE, SWITZERLAND.

Application No. 134034 filed December 21, 1971

1 Claim

A process for the production of bis-triazole compounds of formula I shown in the accompanying drawings where A and B may be defined as the atoms or groups of atoms, necessary for the completion of condensed rings selected from the following: benzene, naphthalene, acenaphthene, phenanthrene, benzotriazole, pyrazole and indazole and which may be substituted and n has a value from 1 to 6, wherein 1 mol of an ortho-aminophenol of formula (VII) shown in the drawings where A has the above meaning and 1 mol of an ortho-aminophenol of formula (VIII) shown in the drawings where B has the above meaning are acylated in a manner as herein described in either order with 1 mol of an aromatic dicarboxylic acid of formula (III) shown in the drawings where n has a value from 1 to 6 or one of its functional derivatives and then condensed in a manner as herein described.

## CLASS 127-N.

134108

## A DEVICE FOR SOLDERING.

RAVINDRA GODBOLE, OF SAKHA KRIPA, SAYAJI-GUNJ, BARODA-5.

Application No. 134108 filed December 28, 1971.

## 4 Claims

A soldering apparatus comprising a means for feeding the soldering wire to the soldering nose, and means for heating the said soldering nose wherein said means for feeding the soldering wire comprise a carrier table, means for causing the said table to reciprocate, at least one feed finger on the table to help the wire to travel forward with the forward movement of the table and a return stop catch to restrain the return of the wire on the return movement of the table, the wire being guided to the soldering nose through a guide tube which is being heated.

## CLASS 85-B.

134304

## RADIANT LINING FOR FURNACES, OVENS AND LIKE.

RICHARD WILLIAM ULBRICH, OF 126 WEST DIXON AVENUE, DAYTON, OHIO 45419, UNITED STATES OF AMERICA.

Application No. 134304 filed January 18, 1972.

## 15 Claims

In an apparatus for generating heat in a confined area comprising means for directing heat toward said area, and radiant lining means contiguous to at least a portion of said area for intercepting heat leaving said area and radiating heat back into said area, said radiant lining means comprising a plurality of discrete strands formed into a mat configured to approximate the contiguous portion of said area.

## CLASS 31-C, 126-C.

134670

## MEASUREMENT UNIT OF Q-METER.

SIBIRSKY GOSUDARSTVENNY NAUCHNO-ISSLEDOVATELSKY INSTITUT METROLOGII, OF NOVOSIBIRSK, ULITSA ROVOLJUTSII, 38, USSR.

Application No. 134670 filed February 18, 1972.

## 3 Claims

A measurement unit of a Q-meter comprising a variable capacitor whose stationary portion is electrically coupled with the secondary winding of a coupling transformer made as a hollow column around a ring-shaped core with a primary winding and having a central part passing through a core hole, and terminals for connecting a circuit or circuit element with a Q-factor to be measured, one of which terminals is integrated with the central column of the hollow column and the other is connected through a current collector with the moving elements of the variable capacitor, wherein electrical coupling of the stationary portion of the variable capacitor with the coupling transformer secondary is accomplished by direct contact of the hollow column with the stationary portion of the variable capacitor.

## CLASS 139-G.

134672

## PROCESS OF REMOVING SULFUR DIOXIDE FROM A GAS STREAM.

WELLMAN-POWER GAS INCORPORATED, OF NEW MULBERRY HIGHWAY, LAKELAND, FLORIDA, UNITED STATES OF AMERICA.

Application No. 134672 filed February 18, 1972.

## 13 Claims

A method of removing sulfur dioxide from a gas containing the same comprising contacting said gas in an absorption zone with a lean aqueous absorbing solution of a metal sulfite selected from the group consisting of sodium, lithium and beryllium sulfites to absorb sulfur dioxide in said gas by converting sulfite to bisulfite and to yield a spent absorbing solution containing the corresponding metal bisulfite; subjecting spent absorbing solution in a desorption zone to elevated

temperatures sufficient to accomplish three things; (a) decomposition of bisulfite to sulfite, sulfur dioxide and water, (b) removal of sulfur dioxide and water from the solution in vapor form, and (c) precipitation of sulfite out of the solution; passing slurry undergoing decomposition in said desorption zone through the tubes of an indirect heat exchanger while supplying heat to said slurry for said decomposition; and recycling sulfite of said slurry to the absorption zone; characterized by having an undissolved solids content in the slurry passing through the heat exchanger tubes of at least about 25 weight percent.

## CLASS 98E+G 132C &amp; D.

134724

## STATIC HEAT GENERATOR FOR THE CONVERSION OF LIQUIDS INTO DRY-MICRO-PARTICLES AND INTO NON-PARTICULAR GASES.

HMS—IBERICA, S.A., OF LA GRANJA, 8, BARCELONA, SPAIN.

Application No. 134724 filed February 23, 1972.

## 4 Claims

Static heat generator for conversion of liquids into dry microparticles and into non-particulate gases, characterized in that the liquid product to be atomised is subjected to a high pressure which varies according to cases, in a mixing chamber, where the liquid is introduced through a key device to a circuit which constitutes a pre-heating coil, the end of which is a turbine type ejector which atomises the liquid inside the mixing chamber, the bottom portion of which is amply open to permit the entry of cool air in a suitable proportion to give the optimum mixture in the desired atomisation, the said mixing chamber being further provided with shielded electric resistors for heating the cold air and at its upper portion with a filter and an ejection tube.

## CLASS 65-A-2, 206-D &amp; E.

134741

## A PULSE TRANSMITTER FOR TRIGGERING A THYRISTOR.

SIEMENS AKTIENGESellschaft, OF BERLIN AND MUNICH, GERMANY (WEST).

Application No. 134741 filed February 24, 1972.

## 9 Claims

A pulse transmitter for triggering a thyristor, comprising primary and secondary winding inductively linked with one another so that a pulse produced in the primary winding causes a corresponding pulse to appear in the secondary winding, the opposite ends of the secondary winding being for connection respectively to the cathode and the control electrode of a thyristor, and two metal screens disposed face-to-face but spaced apart from one another between the primary and secondary windings which screens have respective mutually opposed electrical contact points thereon, the contact point of that one of the said screens which is nearer the primary winding being for connection thereto or to earth while the opposite contact point, of the other screen, is connected to that end of the secondary winding which is for connection to the said cathode.

## CLASS 86-B.

134814

## SELF-ADJUSTMENT FOR BODY SUPPORT CUSHION.

UNIVERSAL OIL PRODUCTS COMPANY, NO. 10 UOP PLAZA-ALGONQUIN &amp; MT. PROSPECT ROADS, DES PLAINES, STATE OF ILLINOIS, UNITED STATES OF AMERICA.

Application No. 134814 filed March 3, 1972.

## 6 Claims

In an adjustable back support cushion comprising in combination, an air-tight cushion envelope of desired shape containing a resilient open-cell foam cushion material, an ambient air passageway means into said envelope having associated therewith a manually controllable valving means which permits control of air flow into and out of said envelope and cushion material, the improvement which comprises at least one small bleed-in orifice through a portion of the valving means, and an orifice-closing member adapted to engage with and close said orifice to outward flow of air under the influ-

ence of super-ambient pressure within said envelope and to disengage from and open said orifice to inward flow of air under the influence of sub-ambient pressure within said envelope.

CLASS 63-F, 107-J.

134992

#### STARTER MOTORS FOR INTERNAL COMBUSTION ENGINES.

JOSEPH LUCAS (INDUSTRIES) LIMITED, OF GREAT KING STREET, BIRMINGHAM 19, ENGLAND.

Application No. 134992 filed March 20, 1972.

Convention date April 3, 1971 (8628/71) U.K.

#### 6 Claims

A starter motor for an internal combustion engine including a casing, a rotor shaft journaled in the casing for rotation relative to the casing and carrying an armature assembly, a pinion assembly mounted on the rotor shaft for limited rotational movement relative thereto, and capable of axial movement relative to the shaft between a retracted position and an operative position wherein during use of the starter motor a pinion of the pinion assembly drivingly engages a ring gear of an engine to be started, the shaft and the pinion assembly being inter-connected by way of a helical screw thread, a member frictionally engaged with the pinion assembly for rotation therewith, and a detent device engageable with said member so as to resist rotation of the member and thereby resist rotation of the pinion assembly so that when the rotor shaft is rotated the pinion assembly is driven towards its operative position by the action of said helical screw thread, said detent device in the operative position of the pinion assembly, engaging behind the pinion assembly so as to resist movement of the pinion assembly towards its retracted position, the detent device being returned to a position clear of the pinion assembly when the starter motor is de-energised.

CLASS 141-A.

135113

#### PRODUCTION OF METALLURGICAL PELLETS IN ROTARY KILN.

KOKAN MINING COMPANY LIMITED, 3-2, MARUNOUCHI 2-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Application No. 135113 filed March 30, 1972.

#### 19 Claims—No drawings.

A process for treating pellets formed from a mixture of iron oxide-bearing material and particulate carbon to cause a reduction of at least a portion of the iron oxide in said material while said pellets are passed through a rotating tubular kiln, said kiln having an inlet end and a discharge end, in cascading paths and generally countercurrent to the hot products of combustion from a combustion zone resulting from a heating flame, comprising (a) establishing said combustion zone adjacent the discharge end of said kiln; (b) providing said heating flame with oxygen in an amount exceeding the amount required for complete combustion and maintaining in the portion of said combustion zone nearest the discharge end of said kiln from 0.1 to 5.0 vol. of free oxygen; (c) heating the said pellets in said combustion zone to a temperature in excess of 1100°C. but below the temperature at which the pellets fuse together whereby to reduce said iron oxide with the formation of carbon monoxide; (d) introducing additional free oxygen into the hot gases leaving said combustion zone; and (e) passing said pellets through said kiln in less than 1.5 hours.

CLASS 6-A-3

135405

#### HERMETIC MOTOR COMPRESSOR UNIT

CARRIER CORPORATION, AT SYRACUSE, NEW YORK, UNITED STATES OF AMERICA.

Application No. 865/Cal/73 filed April 12, 1973.

Division of Application No. 132028 filed July 8, 1971.

#### 3 Claims

A hermetic motor-compressor unit of the type employed in a mechanical refrigeration system having a crankshaft disposed for rotation in a crankcase, a cylinder, a piston disposed in a cylinder and connected to an eccentric portion of the

crankshaft by a wrist pin and a connecting rod, a cylinder head, and a cylinder block including means defining said cylinder; wall means connected to said cylinder defining means and having a portion spaced therefrom to define a space therebetween; means disposed in said space between said wall means and said cylinder means and connected thereto, said last-mentioned means separating said space into a plurality of serially connected silencer chambers; means for supplying refrigerant gas that has been compressed by operation of said piston in said cylinder into said space, the gas passing through said serially connected silencer chambers, to attenuate the sound caused by the pulsating characteristic of gas discharged from the cylinder; and means defining a discharge conduit connected to said space for discharging the gas from said cylinder block.

CLASS 98D+E.

135406

#### HEATER FOR LUMP MATERIALS.

VSEŠOJUZY NAUCHNO-ISLEDOVATELSKY I PROJEKTYNÝ INSTITUT PO OCHISTKE TEKHOLOGICHESKIKH GAZOV, STOCHNYKH VOD I ISPOLZOVANIJU VTORICHNYKH ENERGORESURSOV PREDPRIYATY CHERNOI METALLURGI, PROSPEKT LENINA 9, KHARKOV, USSR.

Application No. 47/1972 filed April 26, 1972.

#### 2 Claims

A heater for lump materials which has a chamber in which effluent waste gases are passed said heater comprising at least one shaft wherein the material to be heated is charged and said shaft is formed by a framework being secured on the gaspermeable walls, characterised in that the framework is made up of pipes interconnected in the lower and upper parts of the shaft by lower and upper headers the lower header being fitted with means for feeding water and the upper header with means for discharging water-steam emulsion.

CLASS 37-B.

135407

#### CONTINUOUSLY OPERATING SUGAR CENTRIFUGAL.

BRAUNSCHWEIGISCHE MASCHINENBAUANSTALT, OF 3300 BRAUNSCHWEIG, AM ALTEN BAHNHOF 5, FEDERAL REPUBLIC OF GERMANY.

Application No. 92/1972 filed May 1, 1972.

#### 4 Claims

Continuously operating sugar centrifugal, the conical screening basket of which is rotating around a perpendicular axle and having a massecuite feeding device comprising an inlet tube being assembled coaxially to the center of rotation of the screening basket, a distribution cup being assembled at the hub of the screening basket and an acceleration cone characterized in that the inlet tube (4) is projecting into the inside of the distribution cup (12) the distribution cup being equipped with several perpendicular distributing pins (13), which are assembled between the inlet tube and the lateral wall of the distribution cup and their upper ends are assembled between the bottom edge (14) of the inlet tube and the top edge of the distribution cup, the inlet tube being funnel-shaped at the top end (3) and being equipped with an annular tube which is connected to the wash water feed line and perforated at the inside of the ring in order to direct wash water jets (8) radially to the center of the inlet tube on the massecuite jet (2) and the inlet tube being at least perforated at an upper part of its length and equipped with a double shell (10) which is connected to the steam feeding line.

CLASS 206-E.

135408

#### FABRICATION OF MONOLITHIC INTEGRATED CIRCUITS.

RCA CORPORATION, OF 30 ROCKEFELLER PLAZA, NEW YORK, NEW YORK, 10020 UNITED STATES OF AMERICA.

Application No. 356/72 filed May 30, 1972.

#### 12 Claims.

An integrated circuit comprising a monolithic body comprising a first region of semiconductor material contiguous with

a second region of insulating material; on said second region a thin layer of semiconductor material, said layer being disposed out of direct contact with said first region; a semiconductor component within said first region and a semiconductor component within said layer; and metal connectors on a surface of said first region and on a surface of said second region for electrically connecting to each of said components.

CLASS 105-B, 126-A.

135409

### THREE PHASE SEQUENCE INDICATOR.

JITENDRA PAL GUPTA, M. G. POLYTECHNIC, HATHRAS (ALIGARH), UTTAR PRADESH STATE, INDIA.

Application No. 381/1972 filed May 31, 1972.

#### 3 Claims.

A three phase sequence indicator comprising of a coil-former wound with three electromagnetic coils electrically connected in star system and having hole throughout its length along the axis of said electromagnetic coils through which a rod made of magnetic material is passed which will move along its length to indicate the phase sequence and means for observing the movement of the said rod.

CLASS 83A-1 & 182B.

135410.

### A METHOD OF PRODUCING AN IMPROVED FOOD-STUFF.

TAKEDA CHEMICAL INDUSTRIES, LTD., OF 27 DOSHOMACHI 2-CHOME, HIGASHI-KU, OSAKA, JAPAN.

Application No. 1066/Cal/73 filed May 7, 1973.

Division of application No. 130649 dated March 20, 1971

#### 3 Claims—No drawings.

A method for producing an improved foodstuff, which comprises incorporating a reliable  $\beta$ -1, 3-glucan-type polysaccharide into the food material, the amount of polysaccharide relative to the food material being about 0.05 to 13% by weight, and then subjecting the mixture to heating procedure.

CLASS 491.

135411.

### IMPROVEMENTS IN TIFFIN CARRIER AND THE LIKE.

PHIROZE KAIKHUSHRU ENGINEER, C/O. MRS. HOMAI DASTURJI ADERI-ANWALA, 614, SACHAPIR STREET CAMP, POONA-1, MAHARASHTRA STATE, INDIA.

Application No. 395/72 filed June 1, 1972.

#### 6 Claims.

An improved tiffin carrier comprising two or more vessels or containers placed one above the other, one top cover and at least two vertical side straps with engagement means at both ends to hold together the vessels or containers with the top cover, characterised by that the said side straps have 'J' shaped bent at its lower ends for engagement with clamps provided on the outside of bottom vessel whereas the upper end of side strap has a lever hingedly attached by means of a pin, the said lever being hingedly attached to a bent hook by means of another pin at a distance from the former pin wherein the free end of the said bent hook is provided with hole or notching or recess for engagement with any projected part or recess on the said top cover in such a way that lever being pressed after engaging the lower end of side strap, the hook presses and engages on top cover holding the vessels in vertical position, the said side strap having locking arrangement for the lever, comprising a projected eye fitted to the side strap, the said eye passes through a notch provided in the lever.

### OPPOSITION PROCEEDINGS

The opposition entered by Hind Ceramics Limited to the grant of a patent on application No. 123699 made by Council of Scientific and Industrial Research as notified in Part III, Section 2 of the Gazette of India dated the 15th April 1972 has been partly allowed and a patent has been ordered to be

sealed on the application subject to amendment of the specification.

### PATENTS SEALED

127543 127546 127568 127603 127622 128646 128713 128721  
128783 128878 128888 128951 129023 129081 129112  
129120 129426 129666 129780 129811 130091 130247 130361  
130422 130500 130586 130694 130785 130817 120949 131061  
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### PATENTS DEEMED TO BE ENDORSED WITH THE WORDS "LICENCES OF RIGHT"

The following patents are deemed to have been endorsed with the words "Licences of right" under Section 87 of the Patents Act, 1970. The dates shown in the crescent brackets are the dates of the patents.

#### No. & Title of the invention

- 108004 (17-11-66) New azo dyestuffs and their manufacture.
- 108013 (17-11-66) Improvements in and relating to the recovery of vanadium from magnetite.
- 108021 (2-2-66) Process in the production of pulp from lignocellulose containing material.
- 108035 (18-11-66) Improvement in the manufacture of linear fibre-forming polyesters.
- 108048 (19-11-66) Purification of phenol.
- 108049 (19-11-66) Improvements in or relating to the processing of natural rubber.
- 108050 (19-11-66) Improvements in or relating to the processing of natural rubber.
- 108066 (22-11-65) Method for removing water from aqueous solutions of solids and apparatus.
- 108071 (24-5-65) Process for the preparation of trans-chrysanthemic acid and derivatives thereof.
- 108076 (21-11-66) Process for the refining of waxes.
- 108086 (22-11-66) A method for the preparation of synthetic granular caviar.
- 108112 (23-11-66) Method and apparatus for producing carbon black.
- 108113 (23-11-66) Process and apparatus for continuous production of slush of liquid containing frozen particles.
- 108116 (23-11-66) Process for obtaining disproportionated rosin from gum rosin.
- 108118 (23-11-66) Improved process for the controlled production of chlorine and caustic soda and chlor-alkali diaphragm cell for use therein.
- 108122 (23-11-66) Method for preparing oligomers and the oligomers so produced.
- 108123 (23-11-66) Improvements in emulsion addition polymerization for the production of addition polymers.
- 108124 (23-11-66) Improvements in emulsion addition polymerization for the production of addition polymers.
- 108151 (25-11-66) Pesticides.
- 108156 (23-8-66) Process for the preparation of furylmethyl alcohols.
- 108175 (26-11-66) Fractional carbonization of coal
- 108183 (29-11-66) Improvements in or relating to processes of making steels having improved machining properties.
- 108187 (29-11-66) Process for hydroprocessing of a feed and catalyst composition therefor.
- 108199 (12-7-66) Improvements in or relating to the preparation of monomeric acrylamide.
- 108204 (29-11-66) Manufacturing of dry corn syrup.
- 108221 (30-11-66) Method and apparatus for the production of carbon black.
- 108230 (30-11-66) Azo dyes of low solubility in water, a process for the production thereof, and fibres or fibre materials dyed, padded or printed therewith.

108237 (12-8-66) Purification of dichlorotetrafluoroethane.	89660	89682	89726	89748	89992	90609	94758
108238 (30-11-66) Process for producing granular compound fertilizer.	94805	94915	94962	94963	95011	95012	95019
108240 (30-11-66) Tea extracts and process for producing the same.	95037	95043	95057	95068	95103	95113	95114
108261 (7-12-65) Binding agents containing hydrolysed silicate esters, process for the preparation thereof and refractory materials made therefrom.	95137	95149	95150	95216	95217	95242	95284
108284 (31-12-65) Improvements in or relating to a process for the coagulation of latex.	95311	95323	95324	95325	95374	95378	95489
108288 (3-12-66) Improved pyrogenic $TiO_2$ pigment and method of producing same.	95537	95562	95608	95721	95843	96455	97131
108297 (7-12-65) Oral preparations and a process for making them.	97133	97657	100307	100388	100609	100648	100691
108302 (5-12-66) Process for the preparation of $\alpha$ -amino acids.	100844	100886	100935	100937	100955	100957	100957
108305 (5-12-66) Pesticidal preparations.	100977	100980	101035	101037	101078	101088	101088
108311 (6-12-66) Purification of ammonia synthesis gas.	101110	10112	101176	101201	101243	101297	101297
108329 (7-12-66) Process and reactor for biological purification of sewage waters, with low pollution loads of the mineral oil processing industry.	101301	101408	101535	101686	101783	101785	101785
108330 (7-12-66) A process and apparatus for destructive treatment of sewage sludge from petroleum processing industry.	101793	101806	102262	106276	106301	106480	106480
108343 (8-12-66) Process for the preparation of potassium carbonate using ion-exchange technique.	106482	106493	106501	106517	106551	106552	106552
108363 (9-12-66) Gelating compositions and a process of making them.	106579	106580	106585	106646	106647	106683	106683
108366 (9-12-66) Process for preparing an oil-in-water emulsion.	106773	106779	106785	106805	106812	106822	106822
108368 (9-12-66) A process for removal of silicates from a waste liquor of alkaline pulping process.	106840	106930	106980	107021	107025	107139	107139
108369 (9-12-66) Disazo dyes, process for their production and materials whenever dyed with the same.	107149	107150	107255	107479	107533	107580	107580
108370 (9-12-66) Purification of olefinically unsaturated nitriles and apparatus therefor.	107585	107866	108156	108182	108237	109269	109269
108376 (12-12-66) Process for manufacturing sodium fluoride of chemically pure grade from the fluorine content of wet process phosphoric acid in fertilizer industry.	109346	111391	111466	111565	111574	111639	111639
108405 (20-12-65) Improvements relating to the selective cracking of hydrocarbons.	111648	111768	111811	111812	111824	111852	111852
108420 (13-12-66) Production of ethylbenzene hydroperoxide.	111872	111877	111883	111911	111915	111947	111947
108432 (13-12-66) Water-insoluble azo dyestuffs and process for their manufacture and use.	111975	112003	112056	112057	112064	112086	112086
108446 (14-12-66) Process for the recovery of ammonium sulfate from aqueous ammonium sulfate solutions containing organic components.	112117	112166	112168	112174	112179	112229	112229
	112344	112451	112464	113051	113198	115035	115035
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## CESSATION OF PATENTS

RENEWAL FEES PAID							
64796	64883	64889	64999	65000	65469	65470	
65512	65914	66035	66142	67143	67616	67617	
67618	67619	68371	68600	68631	68633	68713	
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69608	69632	70219	70294	70470	71673	72408	
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## STORATION PROCEEDINGS

(1)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 74435 granted to Mineral Deposits Pty. Limited for an invention relating to "Method and apparatus for the wet gravity concentration of ores". The patent ceased on the 24th December, 1972 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part III, Section 2, dated the 21st July, 1973.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate, with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-17 on or before the 4th October, 1973 under Rule 60 of the Patents Rules, 1972. A written statement, in triplicate, setting out the nature of the opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(2)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 95597 granted to Rasiklal Gandadal Khokhani subsequently assigned to Bhupatrai Keshavlal Doshi for an invention relating to "improvements in or relating to a method or manufacturing a sandwiching element". The patent ceased on the 10th September, 1971 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part III, Section 2, dated the 31st March, 1973.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-17 on or before the 4th October 1973 under Rule 60 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(3)

Notice is hereby given that an application for restoration of Patent No. 99419 made by the Kuljian Corporation (India) Private Limited on the 23rd February, 1973 and notified in the Gazette of India, Part III, Section 2 dated the 31st March, 1973 has been allowed and the said patent restored.

(4)

Notice is hereby given that the application for restoration of Patent No. 108361 made by Sunit Kumar Mukherjee, Amar Bose and Gayatri Mukherjee on the 21st July, 1972 and notified in the Gazette of India Part III, Section 2 dated the 17th March, 1973 has been allowed and the said patent restored.

(5)

Notice is hereby given that an application for restoration of Patent No. 108730 made by Chemical Construction Corporation on the 2nd March, 1973 and notified in the Gazette of India, Part III, Section 2 dated the 7th April, 1973 has been allowed and the said patent restored.

Notice is hereby given that an application for restoration of Patent No. 111817 dated the 4th April, 1967 made by Sunit Kumar Mukherjee on the 24th February, 1973 and notified in the Gazette of India, Part III, Section 2, dated the 31st March, 1973 has been allowed and the said Patent restored.

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in each entry is the date of registration of the design included in the entry.

Class 1. No. 140720. Kulwant Singh Grover proprietor of; Grover Domestic Appliances, Sector 6, Plot No. 117, Faridabad (Haryana) India, Indian National, "An electrical oven", March 5, 1973.

Class 11. Nos. 140480 & 140481. Natwarlal Gordhandas Hindocha, Domiciled Indian, Sosale Gopalaswamy Kittu, Indian, Tarun Kumar Natwarlal Hindocha, British Subject, and Nuggehalli Keshava Iengar Sunder Raj, Indian Trading as Fibro Reinforced Plastic Industries, No. 9, Shurungar Shopping Centre, Church Street, Bangalore-1, Mysore, A registered Indian Partnership firm, "Helmets", December 16, 1972.

*Copyright Extended for a second period of five years*  
Design No. 140243—Class-3.

*Copyright extended for a third period of five years*  
Design No. 140243—Class-3.

S. VEDARAMAN,  
Controller General of Patents,  
Designs and Trade Marks

